

S. FREDIANI.
LOCK.
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1,058,667.

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Fig. 1.

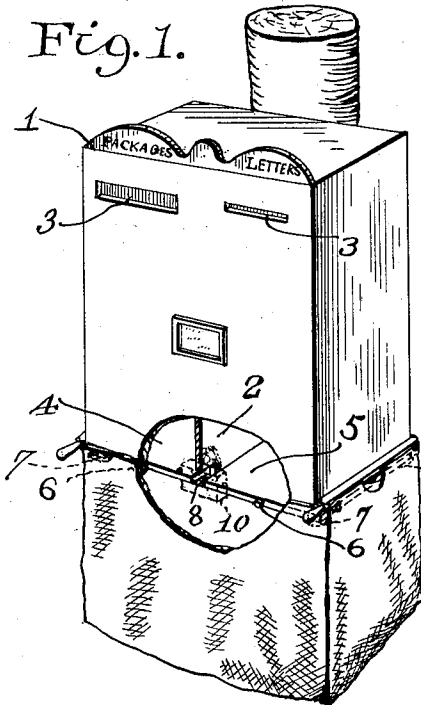


Fig. 3.

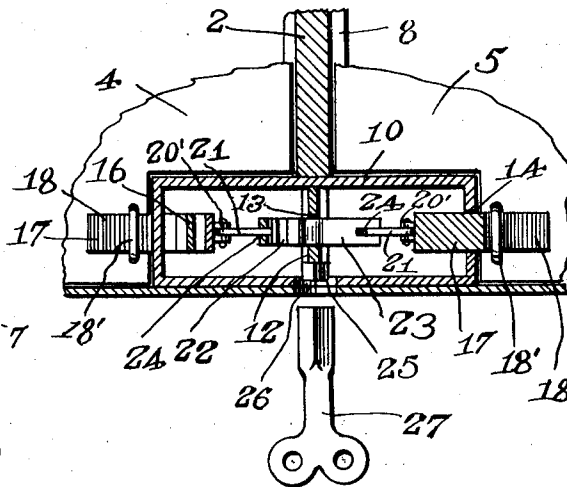
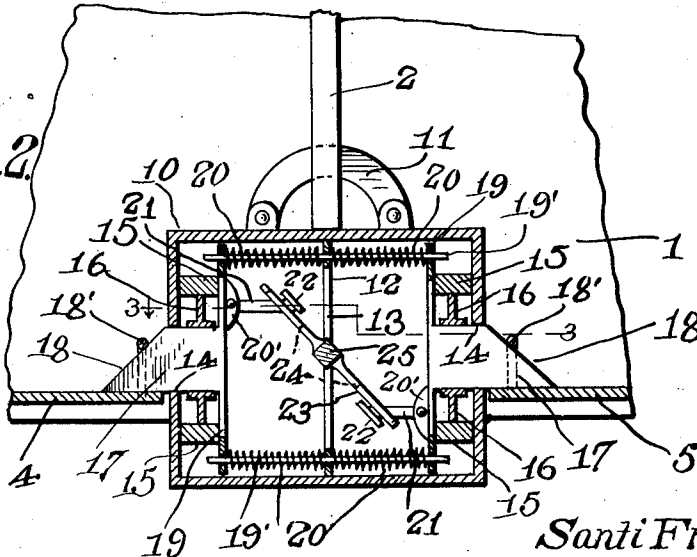


Fig. 2.



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LOCK.

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Original application filed August 14, 1912, Serial No. 715,045. Divided and this application filed November 14, 1912. Serial No. 731,375.

To all whom it may concern:

Be it known that I, SANTI FREDIANI, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Locks, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in locks for mail boxes and the like, the same being a division of my pending application, filed August 14th, 1912, Serial Number 715,045, and the primary object of the invention is to provide an improved lock for simultaneously retaining a pair of swinging sections in closed position.

15 A further object of the invention resides in providing a lock which, while capable of simultaneously retaining a pair of swinging sections in closed position, will admit of either of said sections being disposed to locked position, independently of the other.

20 A still further object of the invention resides in providing a lock which is simple in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

25 With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

30 In the accompanying drawing forming a part of this application, Figure 1 is a perspective view of a mail box structure with parts broken away to show the manner of applying my device to use. Fig. 2 is an enlarged vertical section through the lock applied to use; and Fig. 3 is a horizontal section therethrough as seen on line 3—3, Fig. 2.

35 In describing my invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which—

40 1 indicates a receptacle of rectangular design, formed preferably of metal and having a central vertical division wall 2 mounted therein. This divides the device into a pair of compartments, whereby different forms of mail matter may be deposited therein through the medium of the slots 3 in the front wall of the receptacle. The bot-

tom of this receptacle is composed of a pair of sections 4 and 5, which are each pivoted to one side of the center thereof on a horizontal transverse axis in the front and rear walls, as shown at 6 and the one end of each of said sections is weighted as shown at 7. These last mentioned ends of the sections are adapted to contact with the lower edges of the end walls of the receptacle, while the opposite ends thereof are adapted to rest on a transverse plate 8 mounted on the lower edge of the central division walls 2.

60 The structure above set forth forms no part of this invention, as the latter contemplates an improved lock for the retention of the bottom sections 4 and 5 in closed position. To this end, I provide a casing 10 of rectangular design which is secured by means of the bracing arms 11 to the forward edge of the partition or division wall 2 and is held against the inner face of the front wall of the receptacle at its lower edge.

65 Mounted centrally of the casing 10 is a vertical partition wall 12 having the slots or channels 13 formed therein and the side walls of this casing are provided with alining openings 14, while projections 15 are provided on said side walls, and extend inwardly therefrom above and below said openings. Formed on the inner opposed faces of these projections 15, are the additional T-shaped projections or guide members 16 which extend to points in horizontal alinement with the upper and lower edges of the openings 14 in said side walls and slidably disposed between these guide members and through the openings 14, are the locking bolts 17. The upper faces of said locking bolts are beveled inwardly for a portion of their lengths, as shown at 18 and as these portions of the bolts are adapted to extend beyond the walls of the casing, keepers 18' are provided on the inner faces of the sections 4 and 5 to receive the same. The inner ends of said locking bolts 17 are provided with the vertically disposed end plates 19 which are adapted to abut the free ends of the projections 15 to limit the outward sliding movement of said bolts and I have provided means to normally retain said bolts in their extended positions so that the beveled faces thereof extend beyond the side walls of the casing. To this end, I provide the guide rods 19' which extend hori-

zontally through the upper and lower ends of the partition wall 12 and the plates 19 and encircling said guide rods between the partition wall 12 and the inner faces of the plates 19 are the coil springs 20.

Formed on the inner faces of the plates 19, are the ears 20' between which are pivotally mounted the arms 21, the free ends of the latter being provided with heads 22, and pivotally mounted centrally of the partition wall 12, in the slot 13, is an oscillating arm or bar 23. The ends of the latter arm are provided with slots 24 through which said arms 21 are slidably disposed. The pivotal axis of the bar or arm 23 is about mid-way of the ends thereof and also formed at this point is a laterally extending projection 25 which is designed square in cross section, as clearly shown in Figs. 2 and 3 of the drawing.

The front wall of the housing or receptacle 1 is provided with a key opening 26 which registers with the projection 25 above referred to and a key 27 is adapted to be inserted through the opening 26 engaged with said last mentioned projection 25, whereby a turn of said key clock-wise will obviously retract the locking bolts 17.

In Fig. 1 of the drawing, I have shown a bag or other receptacle attached to the lower end of the receptacle 1, which is adapted to receive the mail matter as the bottom sections of said latter receptacle are opened, but as this forms no part of my invention, further description thereof will be omitted. It will also be understood that while I have described my improved lock as being used in connection with a mail box of the type disclosed and described, the same is readily adapted for use in connection with other similar devices wherein a pair of swinging members are to be locked or retained in position.

From the above description of the construction of my improved device, the operation thereof will be readily understood and it will be seen that I have provided an improved lock which is adapted to simultaneously retain a pair of swinging members in locked or closed position. It will further be seen that while this device simultaneously locks two swinging members in closed position, and simultaneously releases the same when the device is unlocked, each swinging member may be individually locked entirely independent of the other. It will further be seen that my device is one which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

While I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be re-

sorted to without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described this invention, what I claim is:—

1. A lock for mail boxes comprising a casing having openings in the side walls thereof, sliding locking bolts mounted in said casing and adapted to extend through said openings, means to limit the outward movement of said locking bolts, spring means to normally dispose said bolts to their extended positions, an oscillating arm pivoted centrally of the casing and having slots therein adjacent the ends of the same, pivoted arms carried on said locking bolts and extended through the slots in said oscillating arm, the ends of said pivoted arms being provided with heads, and means to manually operate said oscillating arm, whereby said locking bolts will be simultaneously retracted to their unlocked positions.

2. A lock of the class described comprising a casing having openings in the side walls thereof, a pair of sliding locking bolts mounted in the casing and adapted to extend through said openings, projections formed on the inner faces of the side walls of said casing to form guide means for said bolts, plates formed on the inner ends of said locking bolts and adapted to contact with said guide means to limit the outward sliding movement of said bolts, spring means cooperating with said plates to normally force the same outwardly in their extended positions, an oscillating arm pivoted centrally of said casing, additional arms pivotally connected to the inner faces of the aforesaid plates and having loose connection with the ends of said pivoted arm, and means to manually operate said oscillating arm, whereby said locking bolts will be simultaneously retracted to their unlocked positions.

3. A lock of the class described comprising a casing having openings in the side walls thereof, sliding locking bolts mounted in said casing and adapted to extend through said openings, projections formed on the inner faces of the side walls of said casing forming guiding means for said locking bolts, plates formed on the inner ends of said locking bolts adapted to contact with said guiding means to limit the outward sliding movement of said bolts, spring means in connection with said plates to normally force the bolts to their outward extended positions, an oscillating arm pivoted centrally of the casing and having slots therein adjacent the ends of the same, pivoted arms carried on said locking bolts and loosely extended through the slots of said oscillating arm, the free ends of said arms being provided with heads, and means to manually operate said oscillating arm.

4. A lock of the class described comprising a casing having openings in the side walls thereof, sliding locking bolts mounted in said casing and adapted to extend through
5 said openings, projections formed on the inner faces of said side walls and forming guiding means for the sliding locking bolts, plates formed on the inner ends of said bolts and adapted to contact with said projections
10 to limit the outward sliding movement of said bolts, a central supporting wall mounted in said casing and provided with a central slot, an oscillating arm pivoted centrally in the slot of said central wall, said arm being
15 also provided with slots adjacent its ends, additional arms pivotally mounted on the inner faces of the aforesaid plates at opposite ends thereof, said additional arms being loosely extended respectively through the slots in said first mentioned arm and
20 provided with heads on the free ends thereof, guide rods secured to said central wall and loosely extended through the aforesaid plates, spring means encircling said guide rods between the wall and said plates to normally force the latter outwardly, and means
25 to manually operate said oscillating arm.
In testimony whereof I hereunto affix my signature in the presence of two witnesses.

SANTI FREDIANI.

Witnesses:

GUY BONISTALLI,
ROBERT ROSSI.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."